

**Statement of Senator Richard L. Russman
of New Hampshire**

**Before the Subcommittees on Health and the Environment
and Oversight and Investigations**

Committee on Commerce

U.S. House of Representatives

Thursday, May 1, 1997

Mr. Chairman and members of the subcommittee, my name is Richard Russman, and I am a state senator from New Hampshire. I want to thank you for this opportunity to testify about the clean air standards for ozone and particulate matter that have been proposed by the Environmental Protection Agency (EPA).

As you know, New Hampshire is one of the northeastern states that is affected by ozone transport, so we have a very strong interest in seeing action taken to address the emission of precursors that lead to ozone formation. The respiratory problems caused by excessive ozone exposure will continue to plague the citizens of my state, not to mention the health of natural resources, if action is not taken. In addition, I believe the people of New Hampshire agree that the threat of fine particulate matter must be addressed, as called for by the American Lung Association and our governor, the Honorable Jeanne Shaheen.

I understand that this subcommittee is concerned about the process undertaken by the EPA in promulgating rules to address ozone and particulate matter problems. Let me say at the outset, I am a proponent of the proposed rules and believe the EPA is going about the process of issuing final rules in a responsible manner. These standards must be established by relying on health based criteria only; that is very specific in the Clean Air Act.

Recently, the National Conference of State Legislatures (NCSL) sent a letter to Ms. Mary Nichols, Assistant Administrator for Air and Radiation at EPA, citing numerous problems with the issuance of the proposed rule and compliance with federal statutes and executive orders. I disagree with the premise and findings of that letter and, as the core of my testimony, I will explain my reasoning to the members of the subcommittee today.

First, let us remember that this is a proposed rule - not final. Many of the arguments raised against the rule are based on the requirements necessary when an agency promulgates a final rule. For that reason alone, many of the arguments raised by the NCSL have no validity.

Second, many opponents criticize EPA for not seeking outside opinions or consultation with the states. Nothing could be further from the truth. Since February, 1994, EPA Administrator Browner has been seeking the advice of affected parties on the issuance of these rules. Under the authority of the Federal Advisory Committee Act (FACA), EPA established working groups to address ozone, particulate matter and regional haze problems. These working groups depend upon the opinions of state and local governments, industry, small businesses and other interested parties to formulate strategies for attainment.

These strategies are designed to help states with implementation programs, which are solely a state and local government responsibility. I do not believe the EPA simply is passing the buck when they claim they are not demanding specific regulatory activities. As you know, the EPA grants authority to the states to implement the rules as they see fit through a state implementation plan. The NCSL recognizes this in its letter to the EPA, stating that "implementation of the Clean Air Act is being carried out by state and local governments."

I don't believe it would be a stretch to say that the Congress and much of the country would be up in arms if the EPA directed the specific actions that states and localities must take. States have asked for and been given authority to implement many federal regulations. This is one of those cases where granting primacy (regulatory authority) has and should continue to work.

In addition to bringing in the views of affected parties through the FACA process, EPA extended the comment period on the rule for 21 days. That extension has allowed more than 40,000 comments to be received via the mail and nearly 18,000 phone and electronic comments to be delivered.

The date for issuing the final rule also was extended after a request by the Administrator. It is important to note that the opponents of the rule were the primary constituency asking for that extension. In response to this, Ms. Browner returned to the judge who issued the initial ruling on particulate matter and petitioned for the delay.

Finally, since issuing the proposed rules, EPA has expanded the representation on the FACA working groups to include more representatives from local governments and small businesses. These actions were not required, but were

carried out by the EPA to ensure adequate input from those expressing most concern. Not once in their letter does the NCSL recognize these ongoing efforts.

With the chairman's approval, I would like to submit for the record the membership of those working groups so that members of the committee will have an idea of the access that various interests have had to the rule making process.

One concern raised by the NCSL letter that I would like to reinforce to you is the issue of funding. We all agree there will be some costs in implementing these rules, although those costs are several years away. With this in mind, the concern about section 105 funding, which provides technical and financial assistance to states, is one that is universal among states. Realizing the role that states and localities play in implementing the nation's environmental laws, I hope the Congress will see the wisdom in providing adequate funding to the EPA to assist in this implementation.

While I am not a member of President Clinton's party, I would like to state that I commend him for the efforts he has made to reform the regulatory process. Since 1993, with the issuance of Executive Order 12866, this administration has made a concerted effort to streamline regulations and to provide justifications for rulemaking. While cost benefit analyses are not a criteria of the Clean Air Act, the EPA complied with the Executive Order and provided the necessary justifications, including analyses of costs and benefits, to the Office of Information and Regulatory Affairs (OIRA) at the Office of Management and Budget (OMB). Your committee and the entire Congress has access to these documents, which I suspect are more thorough than documentation for any other rule the EPA has ever promulgated

In addition to administrative efforts to improve regulatory efficiency, the Congress passed and the President signed numerous pieces of legislation, specifically the Small Business Regulatory Enforcement and Fairness Act (SBREFA), that create obligations for the agencies in establishing rulemaking and give the Congress an oversight role before major rules can go into effect.

I believe this is an appropriate role for the Congress to play, and I think that is one reason that we are having this debate today. However, I do not believe the Congress should try to inject false arguments into the debate when the Clean Air Act is very specific - rules are to be promulgated following health based standards, which are to be reviewed at least every five years. In this case, the statute has been backed up by the courts regarding standards for particulate matter.

The regulatory impact analysis prepared by the EPA attempts to quantify benefits that sometime cannot be quantified, yet the estimated benefits far

outweigh the overall costs. The *Federal* Register notice on the proposed rule states clearly that the regulatory impact analysis for the rules “will be available at the time the implementation strategy is proposed.” I fully expect the analysis to be available and comprehensive when the final rule is issued.

The EPA has focused on health and the primary standard. I have come to the realization that the secondary standard, welfare, might provide significant additional benefits if those were quantified. Regardless, efforts to meet the primary standard also will benefit the welfare of Americans.

As you know, vegetation is harmed by ozone exposure. Unlike most susceptible human populations, it has few means of staying indoors. Agriculture and tourism continue to be the major economic indicators for many districts in this country represented by members of this committee. I am disappointed to see the agricultural community oppose the rule because increased incidences of high ozone exposure have reduced some crop outputs by more than ten percent. Indeed, CASAC unanimously recommended that EPA adopt a secondary standard for ozone more stringent than the primary standard.

In addition, forest ecosystems from the southern Appalachians to the northern Adirondacks are threatened by high levels of ozone. Many states promote their natural areas for tourism, yet these beautiful mountains so far removed from urban settings are threatened by the precursors of ozone and the resulting “burn” that occurs at higher elevations.

The benefits of protecting agricultural production (including timber) and tourism economies will be well worth modifying emissions standards for all the communities that depend upon these natural resources to support their economies. These impacts and benefits must be considered in any discussion of costs.

I also would like to submit for the record, with the chairman’s approval, the recent findings of the Northeast States for Coordinated Air Use Management. These findings back up the need for more stringent ozone standards.

In the case of standards for particulate matter, I believe the benefits will be substantial. I find it distasteful to try to quantify the value of a life, let alone trying to do it for 15,000 individuals. The premature death caused by particulate matter and the debate surrounding the impacts reminds me of the debate about cigarette smoke. Scientist after scientist testified that smoking did not cause lung cancer and that epidemiological tests could not show causality. Just as we reached a clear indication with cigarette smoke, the data now supports the link between particulate matter and respiratory illness.

Since the 1970's industry has tried to analyze the costs of complying with environmental regulations. I don't believe it has ever made accurate estimates. Will there be some costs in implementing these regulations? Yes, and the EPA has made the best estimates available given the uncertainties of how the rules will be implemented at the local level.

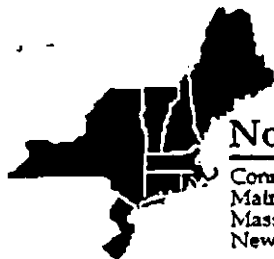
In establishing the health based standards, EPA should not consider costs. In considering implementation strategies, EPA should and has consulted affected parties to consider costs, even before they have issued a final rule.

I will remind you of the excessive costs estimated by the utility and industrial sector during the 1990 Clean Air Act debates. We all know that those horrific scenarios did not and will not play out. Nor has the American economy gone down the tubes, if you will excuse the expression. On the contrary, technology has expanded to meet industrial demand, and states have found innovative and cooperative ways to meet attainment standards.

We may not be able to reach 100 percent attainment compliance in the next ten years, but the effort to achieve those standards will be of value to every man, woman, and child in this country. That is a significant benefit.

In conclusion, I believe the EPA is complying with the law and trying to "protect the public health with an adequate margin of safety" as directed by the Act. We have in place a regulatory system that is more scrutinized today than at any time in recent history. I believe that is a good thing. But I also believe that when agencies are following their mandates, they should be given the necessary support to implement the laws the Congress has passed.

That concludes my testimony. Thank you again for the opportunity to participate, and I will be happy to answer any questions from members of the committee.



NESCAUM Northeast States Coordinated Air Use Management

Connecticut Bureau of Air Management
Maine Bureau of Air Quality Control
Massachusetts Division of Air Quality Control
New Hampshire Air Resources Division

New Jersey Office of Air Quality Management
New York Division of Air Resources
Rhode Island Division of Air Resources
Vermont Air Pollution Control Division

NESCAUM REPORT ON LONG-RANGE POLLUTION TRANSPORT MARCH 12, 1997

Policy Implications:

- There is ample scientific basis **now** to require clean-up of the major electric power **plant**, other large industrial sources, and transportation pollution sources; further study is 'not needed.
- This clean-up effort is required **whether** or not the Clinton Administration's proposed tighter particle and ozone smog health standards are approved. Neither the present or proposed standards will ever be achieved in the Northeast without a significant reduction in transported pollution.
- Ozone smog pollution requires **a regional solution** to reduce the persistently high levels of pollution throughout the **eastern** United States.
- Additional pollution controls in the **Northeast** to compensate for pollution transported into the region are an **environmental and economic burden** imposed on the people and businesses of the Northeast by pollution sources **outside** of the region.

Report Methodology : The "Weight of Evidence" tells the real story

- The **NESCAUM** study is unique because it integrates **information derived from** computer based simulations ("**models**") with **years of** real-world air **quality** and meteorological measurements to assess the magnitude and **impact** of pollution transport. When OTAG modeling simulations are placed within the context of **actual** observed air quality and meteorological **measurements**, a **clear** picture of regional transport emerges.
- The weight of evidence approach combines 1) multi-year field measurements of ozone and its precursors taken both on the ground and **aloft**; 2) the movement of "clean" and polluted air masses; and 3) computer modeling of emissions, chemistry, and meteorological events that have led to severe pollution episodes in the past. Separately, these analytical approaches each support the presence of significant pollution transport: Evaluated together, they lead to the unmistakable conclusion

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that dramatic reductions in NO_x pollution must occur across the Eastern U.S. in order to achieve clean air.

Key Findings:

- **Every state is both contributor and victim.** The Northeast has already committed to significant **reductions (up to 75%) in power plant NO_x emissions.** **The Midwest and Southeast must join in a cooperative effort to achieve NO_x reductions.** The report shows that ozone smog emissions in the Midwest and Southeast regions result in up to half of the prevailing human-related ozone smog in the lower Northeast **states on the worst days.** Northeast **sources** are responsible for the remainder (see Figure 11 from attached Report). **In New England,** the Midwest **influence** tapers to a quarter or less of the **smog** totals; in **states** such as Maine, transported ozone smog emissions come mainly from other Northeastern states **with a** smaller contribution from the upper Midwest. These estimates **are** conservative **because** the models currently **in** use underestimate the extent of transport. Thus reducing transport will have even greater *downwind benefits than the substantial impacts estimated.*
- **It's All One Airshed.** The report – the first to comprehensively combine atmospheric modeling of ozone smog with observed data – demonstrates that, due to atmospheric chemistry and **prevailing wind patterns,** *cleaning up ozone smog to safe levels will require coordinated reductions throughout the entire Eastern airshed.* This **airshed** essentially stretches from **Tennessee** to the Great Lakes and across to Maine.
- **To address transport, we need airshed-wide controls on power plants, automobiles, diesel trucks, buses, and construction equipment.** The report summarizes existing modeling showing that an 80% reduction in power plant smokestack emissions of NO_x and a 60% reduction in ground-level NO_x emissions would reduce average ozone smog levels in the Eastern U.S. by 30-50%. **A substantial portion of these reductions can be achieved by requiring older power plants in the airshed, grandfathered under the Clean Air Act, to meet emission rates that new coal plants have had to routinely implement since 1977.** **Cost-effective retro-fit technologies are commercially available to reduce the emissions from these old power plants by over 80%.** Controlling NO_x emissions from trucks, buses, and construction equipment will provide additional **reductions** needed to achieve cleaner air in the Northeast.
- **These same conclusions apply to pollutants other than ozone smog.** Long-range transport of acid rain emissions, mercury and fine particle precursors is also **well-documented.** *Reducing emissions across the region from power plants, large diesel engines and other major fossil fuel burning sources will simultaneously address all of these problems.*

TECHNICAL SUMMARY

1. **Ozone smog** is transported into and within **the** Northeast. Depending on weather conditions, ozone is **transported** from 100 to over 500 miles downwind.
2. The winds persistently blow from out **of** the Southeast and Midwest and into the Northeast during the most severe **ozone** days in the Northeast. **Long-term** studies of wind patterns show that the worst ozone days in the Northeast coincide with upper-level winds persistently coming out of the Midwest and into the Northeast.

This provides a "conveyor belt" for transporting **pollution** from the Southeast and Midwest to the Northeast.

3. Oxides of nitrogen (**NOx**) are **important pollutants** that initiate ozone formation. Reducing transported **ozone** requires regional reductions in emissions of **NOx**. Ozone **transport is** due to the presence of oxides of nitrogen (**NOx**) emissions that initiate ozone production.

The Ozone Transport Assessment Group (OTAG) modeling results predict that **NOx controls** across the eastern United States **will** reduce ozone transport. While modest **NOx reductions** have some benefit in downwind areas, **ozone** becomes **more sensitive to** even deeper reductions of **NOx**. In other words, the ozone benefits **accelerate** with deeper **NOx reductions**.

Reducing **hydrocarbons**, another **important contributor** to ozone formation, can be effective in some **local urban areas**, but has much less of an **effect** on **transported ozone, even within the same locality**. **This means that reducing** ozone will require a combination of **NOx and hydrocarbon controls**.

4. **The largest sources of NOx pollution** are **coal-fired** power plants in the **industrial Midwest**.

Collectively, the power **plants in the industrial** Midwest are the largest source of **NOx emissions in the country**. These sources are under-controlled, or not controlled at all for **NOx**.

By the year 2007, industrial **NOx emissions** from the **five** Midwest states of IN, KY, MI, OH, and WV **will** be 400% greater than the combined industrial **NOx emissions** from the eight Northeast states of CT, MA, ME, NH, NJ, NY, RI and VT.

5. A persistent ozone "**reservoir**" **exists within the east-central** United States. Due to the concentration of high polluting sources, the Ohio River Valley experiences persistently elevated ozone concentrations. This "reservoir" of ozone is **transported by prevailing winds** to the Northeast and upper Midwest.

In addition to reducing transported ozone, lowering the ozone "reservoir" will **also** improve the local air quality within the Ohio River Valley.

6. Ozone **transported by high wind speeds at high altitudes (>500 meters) above the ground mixes down to reach the surface far downwind.** Measurements from aircraft have recorded high ozone levels ~~in~~ excess of 100 ppb both upwind of and over the Northeast Corridor during the night (The present ozone standard is 120 ppb, averaged over one hour. The proposed new standard is 80 ppb, averaged over eight hours.) During the day, as the sun heats the atmosphere, the high ozone levels aloft ~~mix~~ down to reach the surface, contributing to poor air quality ~~in~~ areas far downwind of pollution sources.
7. Computer modeling predicts that the Northeast benefits significantly when emissions in **the Midwest** and Southeast are reduced. The contribution of human-related ozone in the Northeast from emissions in the Midwest and Southeast are estimated to be up to ~~one-half~~ in the **lower** Northeast to ~~one-quarter~~ in the **upper** Northeast.

The model estimates are *conservative because they likely underestimate the extent of transport.* This gives confidence that reducing transport **will** have even *greater downwind benefits than the substantial* impact already estimated.

8. **Cost-effective NO_x reductions are available throughout the eastern U.S.** The **900 coal-fired power plants in the eastern US.** provide the largest available pool of **cost-effective NO_x reductions.** Substantial NO_x reductions. (50%-60% control) **can be** achieved from uncontrolled utilities for \$300 - \$500 per ton. Stringent additional reductions (80%-90% control) can be achieved for approximately \$1000 per ton. While initial controls on **Midwest** and Southeast facilities are by far the most cost-effective, additional controls on many northeast **utilities** are **also** very cost-effective when compared against additional controls on other sources of NO_x emissions.

The technology to achieve stringent 80%-90% control is proven and operational, here and abroad. The cost of these measures has and will **continue to decline** as worst-case **industry** projections are **replaced** by market-driven competition among technology developers. (The cost of implementing the **acid rain** program has been one-tenth the industry projection.)